Skip to Main Content

IEEE.org | IEEE *Xplore* Digital Library | IEEE Standards Association | Spectrum Online | More IEEE Sites

IEEE *Xplore®*
DIGITAL LIBRARY

◆IEEE

Search Term(s)

SEARCH

Advanced Search | Preferences | Search Tips

Browse

- Journals & Magazines
- Conference Proceedings
- Standards
- Books
- Educational Courses
- Technology Surveys

- My Settings
  - ○ Alerts
  - ○ Purchase History
  - ○ Saved Searches
  - ○ Sign In
  - ○ What can I access?
- Cart

Terms of Use | Feedback ? Help

Search Results

You searched for: **cluster management and adding candidate device**

-
-
- Email
-
-

Results per Page 25
Showing 1 - 25 of 3,219 results

Next»

Sort By: Relevance

Select All | Deselect All

- ☐

Clustering Analysis for the Management of Self-Monitoring Device Networks

Quiroz, A.; Parashar, M.; Gnanasambandam, N.; Sharma, N.;
Autonomic Computing, 2008. ICAC '08. International Conference on
Digital Object Identifier: 10.1109/ICAC.2008.30
Publication Year: 2008 , Page(s): 55 - 64

IEEE Conferences

AbstractPlus | Full Text: PDF (257 KB)

Quick »
Abstract

The increasing computing and communication capabilities of multi-function devices (MFDs) have enabled networks of such devices to provide value-added services. This has placed stringent QoS requirements on the operations of these device networks. This paper investigates how the

computational capabilities of the devices in the network can be harnessed to achieve self-monitoring and QoS management. Specifically, the paper investigates the application of clustering analysis for detecting anomalies and trends in events generated during device operation, and presents a novel decentralized cluster and anomaly detection algorithm. The paper also describes how the algorithm can be implemented within a device overlay network, and demonstrates its performance and utility using simulated as well as real workloads. Read More»

- ☐

The reliability of the optical disk cluster drive

Tanaka, K.;
Optical Data Storage, 2000. Conference Digest
Digital Object Identifier: 10.1109/ODS.2000.848005
Publication Year: 2000 , Page(s): 135 - 137

IEEE Conferences

AbstractPlus | Full Text: PDF (240 KB)

Quick »
Abstract

Optical disk cluster drive is a promising candidate for storing large volume data. The delay of writing caused by defect management can be eliminated by cluster ECC code. The bit error rate achieved by cluster ECC is better than that attained by defect management. Non stop operation was studied Read More»

- ☐

Peer-to-peer content sharing in wireless networks

Marossy, K.; Csucs, G.; Bakos, B.; Farkas, L.; Nurminen, J.K.;
Personal, Indoor and Mobile Radio Communications, 2004. PIMRC 2004. 15th IEEE International Symposium on
Volume: 1
Publication Year: 2004 , Page(s): 109 - 114 Vol.1

IEEE Conferences

AbstractPlus | Full Text: PDF (482 KB)

Quick ▶
Abstract

A very efficient peer-to-peer application layer architecture is analyzed as a potential candidate for wireless peer-to-peer applications. Its performance in terms of generated traffic and load balance are simulated for different network sizes. A number of candidate cluster topologies are proposed. Based on the simulation results, the optimal cluster topology and cluster size are identified. We conclude that cluster sizes that are the square root of the number of nodes generate uniform traffic. The cluster topology should be star, ring or a compromise between the two, 'planned N'. We show that, for these topologies, the traffic increases less than linearly with the number of nodes in the network, making it highly scalable. Our conclusions are valid for uniform query and update distributions. In addition to the approach from earlier work (Csucs, G. et al., 2002), maintenance aspects are also dealt with; we briefly describe the basic link management procedures that make such networks feasible, but we do not cover their performance analysis. Neither do we treat query topologies. Read More»

- ☐

Technology assessment and insertion for the Defense Information Systems Network (DISN)

Blohm, W.; Bylund, H.; Defiore, C.; Shah, S.H.;
Military Communications Conference, 1993. MILCOM '93. Conference record. 'Communications on the Move'., IEEE
Volume: 3
Digital Object Identifier: 10.1109/MILCOM.1993.408661
Publication Year: 1993 , Page(s): 1053 - 1057 vol.3

IEEE Conferences

AbstractPlus | Full Text: PDF (352 KB)

Quick ▶
Abstract

The DISN will evolve with new capabilities being added based on requirements and availability of technologies. The identification and transition of technologies from the research and development communities, including service laboratories, industry, and academia, to the acquisition managers require an approved process that defines the methodology and assigns responsibilities. The main purpose of this paper is to present and discuss the strategy for technology insertion into DISN. In order to accomplish this, a management process for technology insertion has been defined which addresses three key issues to insure that the programmatic/cost and technical risks are minimized. The principal driver for technology insertion is the identification of candidate technologies that are in concert with the approved DISN architecture which have the potential to enhance the capabilities of the DISN in meeting the needs of the warfighters/customers in a cost effective way Read More»

- ☐

Hardware and software techniques for controlling DRAM power modes

Delaluz, V.; Kandemir, M.; Vijaykrishnan, N.; Sivasubramaniam, A.; Irwin, M.J.;

AbstractPlus | Full Text: PDF (1526 KB)

Quick ▸
Abstract

The anticipated explosive growth of pervasive and mobile computing devices that are typically constrained by energy has brought hardware and software techniques for energy conservation into the spotlight. While there have been several studies and proposals for energy conservation for CPUs and peripherals, energy optimization techniques for selective operating mode control of DRAMs have not been fully explored. It has been shown that, for some systems, as much as 90 percent of overall system energy (excluding I/O) is consumed by the DRAM modules, thus, they serve as a good candidate for energy optimizations. Further, DRAM technology has also matured to provide several low energy operating modes (power modes), making it an opportunistic moment to conduct studies exploring the potential benefits of mode control techniques. This paper conducts an in-depth investigation of software and hardware techniques to take advantage of the DRAM mode control capabilities at a module granularity for energy savings. Using a

memory system architecture capturing five different energy modes and corresponding resynchronization times, this paper presents several novel compilation techniques to both cluster the data across memory banks as well as to detect module idleness and perform energy mode transitions. In addition, hardware-assisted approaches (called self-monitoring) based on predictions of module interaccess times are proposed. These techniques are extensively evaluated using a set of a dozen benchmarks. It is shown that we get an average of 61 percent savings in DRAM energy using compiler-directed mode control. One of the self-monitored approaches gives as much as 89 percent savings (72 percent on the average), coming as close as 8.8 percent to the optimal energy savings that one can expect with DRAM module mode control. The optimization techniques are demonstrated to be invaluable for energy savings as memory technologies continue to evolve Read More»

- ☐

High Availability Cluster with Combining NAS and ISCSI

Li-Gu Zhu; De-Zhi Han; Shi-Zheng Zhou; Chang-Sheng Xie;

AbstractPlus | Full Text: PDF (353 KB)

Quick ▶
Abstract

To meet enterprise and grand challenge-scale performance and high availability requirements, a new type of storage cluster - iSCSI-based NAS cluster (iNC) is being designed. There are many advantages in an iNC system: firstly, it provides scalability without the added complexity by a single consolidated centralized storage management view for integrating multi-NAS with multi-user virtualized file system; secondly, it provides the flexibility for application by combining file-based NAS and block-based SANs via iSCSI in the same device; thirdly, it provides high performance and high availability by load-balancing and fault-tolerating mechanism; finally, it eliminates the single failure point and the bottleneck of I/O performance for the metadata server by storage agency. In this paper, we describe an implementation that demonstrates and validates iNC' potential. The I/O throughput for both file and block I/O requests, and the availability of our prototype are higher than that of NAS Read More»

☐

Microclimate real-time monitoring based on ZigBee sensor network

Watthanawisuth, N.; Tuantranont, A.; Kerdcharoen, T.;

IEEE Conferences

AbstractPlus | Full Text: PDF (1183 KB)

Quick ▶
Abstract

Monitoring microenvironment at the farm level has recently become one of the hottest topics in precision agriculture. Zigbee technology is then the most prospective candidate for wirelessly networking those field sensors due to its low cost and power consumption and flexible architecture. The microclimate monitoring system in this research is a suit of equipments based on Zigbee networking to measure the air temperature and humidity in a vast area. Every sensor node works on a cluster tree topology which extends the point-to-point distance up to 1 mile (line of sight), allowing this system to cover large farm using less sensor nodes. A sensor node consists of a micro-controller unit connected with air temperature and humidity sensor chips which are packed in a cylindrical louvered housing to prevent fault air temperature and humidity data from solar radiation. Every sensor node uses energy from a solar cell charged by a charger circuit to a battery package that stores power for use during night time. An energy management scheme was implemented to optimize power use for sending and receiving data. The data from every node were sent to the receiver every 8-30 minutes, depending on backup energy status at each node. The humidity and temperature data are stored on a data-logging PC and only current data are displayed on website. Read More»

• ☐

Efficient Image Feature Combination with Hierarchical Scheme for Content-Based Image Management System

Jaekyong Jeong; Hyeongyong Jeon; Chijung Hwang; Byeungwoo Jeon;

IEEE Conferences

AbstractPlus | Full Text: PDF (604 KB)

Quick ▸
Abstract

This paper proposes efficient image feature combinations based on local descriptor and hierarchical indexing scheme obtained by clustering with global descriptor for content-based image management system such as image identification and identical image grouping. As features for the image retrieval, we consider both global feature which has general information of overall image for fast image retrieval and local feature which is based on feature points and has high matching accuracy for fine matching of images. The developed local feature is invariant to image scale and rotation, addition of noise, and change in illumination, thus, it sufficiently performs reliable matching between different views of scene across affine transformation. The method works with global feature among image clusters of database in advance and do fine searching only among image data in the cluster with local feature. In order to decrease computation time, we apply conventional clustering methods to group images similar in their characteristics together so that search can be made in a hierarchical manner by fine matching within partial database of candidate images. It can overcome the drawback of exhaustive matching time between similar images by using only local descriptor. Read More»

•

☐

Evaluation of user throughput for MU-MIMO coordinated wireless networks

Benjebbour, A.; Shirakabe, M.; Ohwatari, Y.; Hagiwara, J.; Ohya, T.;

IEEE Conferences

AbstractPlus | Full Text: PDF (1856 KB)

Interference management is essential toward improving spectral efficiency in wireless networks. During the last decade inter-antenna interference management via multiple-input multiple output (MIMO) transmission has attracted attention for its capability to enhance link spectral efficiency. In a cellular environment, however, inter-cell interference imposes another limit on link spectral efficiency and for MIMO transmission in particular only a marginal portion of the expected gains is obtained. In this paper, as a candidate solution to reduce inter-cell interference and consequently enhance the gains achieved by MIMO, we investigate a coordinated wireless network where multiple base stations are connected to a central station that multiuser (MU)-MIMO precodes ongoing simultaneous transmissions from all coordinated base stations. Specifically, our main goal is to clarify the impact of coordination on spectral efficiency and evaluate user throughput with and without transmit power optimization, for both a hotspot scenario where all base stations can be coordinated (full coordination) and a cellular scenario where only the base stations grouped under the same cluster are coordinated (partial coordination). Read More»

- ☐

A Simple and Fast Algorithm for Global K-means Clustering

Juanying Xie; Shuai Jiang;

AbstractPlus | Full Text: PDF (247 KB)

K-means clustering is a popular clustering algorithm based on the partition of data. However, there are some shortcomings of it, such as its requiring a user to give out the number of clusters at first, and its sensitiveness to initial conditions, and its easily getting to the trap of a local solution et cetera. The global K-means algorithm proposed by Likas et al is an incremental approach to clustering that dynamically adds one cluster center at a time through a deterministic global search

procedure consisting of N (with N being the size of the data set) runs of the K-means algorithm from suitable initial positions. It avoids the depending on any initial conditions or parameters, and considerably outperforms the K-means algorithms, but it has a heavy computational load. In this paper, we propose a new version of the global K-means algorithm. The outstanding feature of our algorithm is its superiority in execution time. It takes less run time than that of the available global K-means algorithms. This great advantage is due to that we improved the way of creating the next cluster center in the global K-means algorithm. We defined a novel function to select the optimal candidate center for the next cluster enlightened by the idea of K-medoids clustering algorithm suggested by Park and Jun. Experiments on some well-known data sets from UCI and on a synthetic data set show that our new algorithm can significantly reduce the computational time without affecting the performance of the global K-means algorithm. The further experiments demonstrate that our improved algorithm outperforms the global K-means algorithm greatly. Read More»

-

☐

A clustering approach to incremental learning for feedforward neural networks

Engelbrecht, A.P.; Brits, R.;

IEEE Conferences

AbstractPlus | Full Text: PDF (340 KB)

Quick ▶
Abstract

The sensitivity analysis approach to incremental learning presented by Engelbrecht and Cloete (1999) is extended in this paper. That approach selects at each subset selection interval only one new informative pattern from the candidate training set, and adds the selected pattern to the current training subset. This approach is extended with an unsupervised clustering of the candidate training set. The most informative pattern is then selected from each of the clusters. Experimental results are given to show that the clustering approach to incremental learning performs substantially better than the original approach Read More»

-

☐

Fuzzy Time Series Prediction with Data Preprocessing and Error Compensation Based on Correlation Analysis

AbstractPlus | Full Text: PDF (1066 KB)

Quick ▶
Abstract

In general, it is difficult to predict non-stationary or chaotic time series since there exists drift and/or non-linearity as well as uncertainty in them. To overcome this situation, we propose an effective prediction method which adopts data preprocessing and multiple model TS fuzzy predictors combined with model selection mechanism. The proposed method uses the differences of time series as predictor input instead of the original ones because the difference data can stabilize the statistical characteristics of those time series and reveals better their implicit properties. In data preprocessing procedure, the candidates of optimal difference interval are determined based on the correlation analysis, and corresponding difference data sets are generated for them. And then, TS fuzzy predictors are constructed for multiple model bank, where k-means clustering algorithm is used for fuzzy partition of input space, and the least squares method is applied to parameter identification of fuzzy rules. Among the predictors in the model bank, the best one which minimizes the performance index is selected, and it works on hereafter for prediction. Finally, the error compensation procedure based on correlation analysis is added to improve the prediction accuracy. Computer simulation on some typical examples is performed to verify the effectiveness of the proposed method. Read More»

-

☐

Power System Loading Margin Estimation Using a Neuro-Fuzzy

Approach

Torres, S.P.; Peralta, W.H.; Castro, C.A.;

IEEE Journals

AbstractPlus | Full Text: PDF (621 KB)

Quick ›
Abstract

Fast methods for estimating voltage stability security limits are crucial in modern energy management systems. In this paper, a method to build a fuzzy inference system (FIS) is developed in order to estimate the loading margin. The main goal is to overcome the disadvantages of conventional methods and to apply this methodology in a real time operation environment. First, some voltage stability indices and variables are presented as candidate inputs to the FIS. Subtractive clustering is used to construct the initial FIS models, and adaptive neuro fuzzy inference systems allow tuning them so that it is possible to obtain better loading margin estimates. Extensive simulations were carried out in order to build data sets that take into account a quasi-random load direction, as well as information regarding base case and contingency situations, including branch, generator, and shunt single outages. Results are provided for the IEEE 30,118, and 300 bus test systems. Read More»

-

☐

Sequential Patterns Mining with Fuzzy Time-Intervals

Chung-I Chang; Hao-En Chueh; Lin, N.P.;

IEEE Conferences

AbstractPlus | Full Text: PDF (390 KB)

Quick
Abstract

The task of sequential pattern mining is useful for various applications, including market analysis, decision support, and business management. One important issue is to discover frequent sequential patterns in a sequence database. And most of the previous works have focus on the order of times. However, the time interval between successive items in patterns is seldom discussed before. With the order of items, sequential pattern is not as good as which is extended with time interval to make the decision. In this paper, we propose an algorithm called sequential pattern mining with fuzzy time intervals (SPFTI). The main idea of SPFTI algorithm is to use the Apriori-like method to mine the frequent sequential patterns of sequence database and use fuzzy theory to mine the time interval between frequent sequences. At first, find the candidate sequential patterns. Then, the frequent sequential patterns are found with the minimum support. In the step of finding frequent sequential patterns, use the fuzzy number to find each time cluster by computing its fuzzy support. And the results are the frequent fuzzy time sequential patterns. Finally, the experimental result verifies that result of our proposed SPFTI algorithm outperforms with the fuzzy sequential patterns mining with fixed time interval. Read More»

-

□

Stampede: a cluster programming middleware for interactive stream-oriented applications

Ramachandran, U.; Nikhil, R.S.; Rehg, J.M.; Angelov, Y.; Paul, A.; Adhikari, S.; Mackenzie, K. M.; Harel, N.; Knobe, K.;

IEEE Journals

AbstractPlus | Full Text: PDF (1235 KB)

Quick
Abstract

Emerging application domains such as interactive vision, animation, and multimedia collaboration display dynamic scalable parallelism and high-computational requirements, making them good candidates for executing on parallel architectures such as SMPs and clusters of SMPs. Stampede is a programming system that has many of the needed functionalities such as high-level data sharing, dynamic cluster-wide threads and their synchronization, support for task and data parallelism, handling of time-sequenced data items, and automatic buffer management. We present an overview of Stampede, the primary data abstractions, the algorithmic basis of garbage collection, and the issues in implementing these abstractions on a cluster of SMPs. We also present a set of micromeasurements along with two multimedia applications implemented on top of Stampede, through which we demonstrate the low overhead of this runtime and that it is suitable for the streaming multimedia applications. Read More»

- ☐

Template-Based Continuous Speech Recognition

De Wachter, M.; Matton, M.; Demuynck, K.; Wambacq, P.; Cools, R.; Van Compernolle, D.;

IEEE Journals

AbstractPlus | Full Text: PDF (1052 KB)

Quick ▷
Abstract

Despite their known weaknesses, hidden Markov models (HMMs) have been the dominant technique for acoustic modeling in speech recognition for over two decades. Still, the advances in the HMM framework have not solved its key problems: it discards information about time dependencies and is prone to overgeneralization. In this paper, we attempt to overcome these problems by relying on straightforward template matching. The basis for the recognizer is the well-known DTW algorithm. However, classical DTW continuous speech recognition results in an explosion of the search space. The traditional top-down search is therefore complemented with a data-driven selection of candidates for DTW alignment. We also extend the DTW framework with a flexible subword unit mechanism and a class sensitive distance measure-two components suggested by state-of-the-art HMM systems. The added flexibility of the unit selection in the template-based framework leads to new approaches to speaker and environment adaptation. The

template matching system reaches a performance somewhat worse than the best published HMM results for the Resource Management benchmark, but thanks to complementarity of errors between the HMM and DTW systems, the combination of both leads to a decrease in word error rate with 17% compared to the HMM results Read More»

- ☐

Value-added services in the Goal DISN

Paoletti, L.; Hyde, J.P.; Hashizume, A.;
Military Communications Conference, 1994. MILCOM '94. Conference Record, 1994 IEEE
Digital Object Identifier: 10.1109/MILCOM.1994.473854
Publication Year: 1994 , Page(s): 838 - 842 vol.3

IEEE Conferences

AbstractPlus | Full Text: PDF (468 KB)

Quick Abstract

The Defense Information System Network (DISN) will be the telecommunications infrastructure for all defense information systems in the future. Its architecture consists of three major building blocks: the transport infrastructure segment; a network management segment; and a value-added services segment. The transport infrastructure will be a high-speed broadband integrated services digital network (BISDN) in a hierarchical arrangement. The network management segment will be integrated in a hierarchically-distributed structure of geographically oriented domains. The value-added services segment is yet to be defined. This paper reports on the first focused work to do that. A definition for value-added services (VAS) is established; distinctions are drawn with other network capabilities and characteristics; twenty (20) candidate VASs meeting the definition are examined, especially with respect to military application; and seventeen (17) are recommended for implementation in the Goal DISN, c.2005+ Read More»

- ☐

Object Tracking by Mean Shift Based on Color Distribution and Simulated Annealing

Hong Yu; Jie Wei; Jin Li;
Future Information Technology and Management Engineering, 2009. FITME '09. Second International Conference on

IEEE Conferences

AbstractPlus | Full Text: PDF (641 KB)

Quick ▶
Abstract

Easily falling into local extremum, plateaus, and fast moving targets couldn't tracked, which are main handicap to mean shift application, especially in those cases to track the multi-articulated human body fine features. Based on the analysis of the causes of the mean shift, in this paper, a new tracking approach, which is the mean shift based on color distribution and simulated annealing (SACD-MS), is proposed for human body tracking. Color distribution is applied, as it is robust to partial occlusion, is rotation and scale invariant. And simulated annealing has the characteristics such as robustness and high efficiency, which can improve the veracity. Local extremum and plateaus of the mean shift can be avoided through information exchange based on color distribution and simulated annealing, and the target candidate positions are added, thereby converging at the mode values of the target candidate region efficiently. At the same time, the tracking ability is ameliorated even if having the occlusion, rapid movement. Experimental results indicate that the proposed algorithm of the SACD-MS is robust and practical. Read More»

- ☐

Extraction of Ambiguous Sequential Patterns with Least Minimum Generalization from Mismatch Clusters

Araki, K.; Tamura, K.; Kato, T.; Mori, Y.; Kitakami, H.;
Signal-Image Technologies and Internet-Based System, 2007. SITIS '07. Third International IEEE Conference on

IEEE Conferences

AbstractPlus | Full Text: PDF (539 KB)

Quick ▶
Abstract

An ambiguous query in sequence databases returns a set of similar subsequences, called a mismatch cluster, to the user. The inherent problem is that it is difficult for users to identify the characteristics of very large similar subsequences in a mismatch cluster. In order to support user comprehension of mismatch clusters, it is important to extract a set of ambiguous sequence patterns with the least minimum generalization in the mismatch cluster. The extraction of the ambiguous sequential pattern set requires an enormous amount of computational time, since we have to discover generalized patterns with minimum covers for the mismatch cluster from candidate generalized patterns. The present paper is a proposal for an iterative refinement method to extract ambiguous sequence patterns with minimum cover for mismatch clusters selected from a sequence database. It includes a proposal to use the method with a domain segmentation method to achieve an efficient pattern extraction. Moreover, a prototype implementing the two proposed methods has been applied to three datasets included in PROSITE in order to evaluate their usefulness. The proposed methods resulted in a high capability to extract ambiguous sequential patterns from mismatch clusters that are provided by an ambiguous query in the sequence database. Read More»

-

  □

Process simplification as a continuous improvement methodology

Seams, C.;
Semiconductor Manufacturing Conference Proceedings, 1997 IEEE International Symposium on
Digital Object Identifier: 10.1109/ISSM.1997.664646
Publication Year: 1997 , Page(s): P119 - P121

IEEE Conferences

AbstractPlus | Full Text: PDF (272 KB)

Quick ▶
Abstract

Integrated circuit process technologies are introduced into manufacturing at a stage where inefficiencies are still present. Continuous effort focused at removing non-value added steps in the process now can reap large rewards. A multi-year process simplification effort spanning

generations of process technologies has paid large dividends in the cost and cycle time of manufacturing. Cypress manages the program to achieve an entitlement of 25% step reduction during manufacturing. The methods by which the simplification effort takes place are instrumental in guiding and sustaining the program such that simplification progress is quicker with each generation of technology Read More»

- ☐

Lazy garbage collection of recovery state for fault-tolerant distributed shared memory

AbstractPlus | Full Text: PDF (1287 KB)

Quick ›
Abstract

In this paper, we address the problem of garbage collection in a single-failure fault-tolerant home-based lazy release consistency (HLRC) distributed shared-memory (DSM) system based on independent checkpointing and logging. Our solution uses laziness in garbage collection and exploits consistency constraints of the HLRC memory model for low overhead and scalability. We prove safe bounds on the state that must be retained in the system to guarantee correct recovery after a failure. We devise two algorithms for garbage collection of checkpoints and logs, checkpoint garbage collection (CGC), and lazy log trimming (LLT). The proposed approach targets large-scale distributed shared-memory computing on local-area clusters of computers. In such systems, using global synchronization or extra communication for garbage collection is inefficient or simply impractical due to system scale and temporary disconnections in communication. The challenge lies in controlling the size of the logs and the number of checkpoints without global synchronization while tolerating transient disruptions in communication. Our garbage collection scheme is completely distributed, does not force processes to synchronize, does not add extra messages to the base DSM protocol, and uses only the available DSM protocol information. Evaluation results for real applications show that it effectively bounds the number of past checkpoints to be retained and the size of the logs in stable

storage Read More»

- ☐

Topic-sensitive keyword map generation for intelligent interaction

Takama, Y.;
IECON 02 [Industrial Electronics Society, IEEE 2002 28th Annual Conference of the]
Volume: 4
Publication Year: 2002 , Page(s): 3080 - 3084 vol.4

IEEE Conferences

AbstractPlus | Full Text: PDF (404 KB)

Quick ▶
Abstract

An immune network metaphor is proposed to improve the expressive power of a keyword map. As the information environment such as WWW grows, the role of information visualization systems becomes important. Compared with the ordinary keyword map, in which only the distance between keywords is a clue to understand it, the proposed method adds the additional information such as landmark and its related keywords into a keyword map. Experimental results show that the immune network metaphor can obtain the keyword map that emphasizes the topic distribution based on the landmarks, with small variance per execution. The proposed system will be the essential foundation for realizing intelligent interaction between the user and the system. Read More»

- ☐

The ticket type settings of rail transit based on multiple objective decision making

Ding Ling; Zhang Ning;
Advanced Management Science (ICAMS), 2010 IEEE International Conference on
Volume: 2
Digital Object Identifier: 10.1109/ICAMS.2010.5552887
Publication Year: 2010 , Page(s): 121 - 126

IEEE Conferences

AbstractPlus | Full Text: PDF (281 KB)

Quick ▶
Abstract

In order to overcome the casualness in the traditional urban rail transit ticket type settings, solve the problem that the kinds of ticket types are too many to difficult to decide, the paper will classify the rail transit tickets into five types including inevitable type, attracting passengers type, value-added type, relate to concessions type and innovative type based on cluster analysis method. On the basis, it will establish multiple objective decision making model, use Multiple Objective Grey Relational Grade judgment matrix to calculate the relational vectors between designed ticket types and best ticket types, so as to obtain the selecting sequence of tickets under each type. Finally, it will give the suggestions of ticket type settings in different operation stage of urban rail transit. The results showed that: the result of cluster analysis is scientific and rational, and it can be used as the basis for multi-objective decision-making, multi-objective decision-making results can be theoretical basis for urban rail transit operating decision-makers. Read More»

- ☐

C for system level design

Arnout, G.;
Design, Automation and Test in Europe Conference and Exhibition 1999. Proceedings
Digital Object Identifier: 10.1109/DATE.1999.761151
Publication Year: 1999 , Page(s): 384 - 386

IEEE Conferences

AbstractPlus | Full Text: PDF (60 KB)

Quick ▶
Abstract

Few people disagree with the fact that today about 80% of a system is software running on a "platform" of general purpose or custom processors (CPU and/or DSP) tightly coupled with unique dedicated hardware. This makes C (or C++) an obvious candidate for a system level

design language. Without good hardware/software partitioning tools and support for C-based hardware design, the software content may have to increase by necessity. With the right hardware support a system team has the flexibility to make cost, performance, power trade-offs and decide later in the game how much of the system is software and how much is hardware. Another issue is legacy software and hardware. Legacy C software is well understood but legacy hardware is usually only available as RTL (Verilog or VHDL) at best. Therefore the ideal system level design language is C (or C++) based, accommodates hardware design but also co-exists with the vast legacy of Verilog and VHDL based re-usable hardware. CoWare N2C is practical solution, used in real life design around the world, that a) preserves the C software development paradigm for software people, b) adds the necessary clocking to C to enable hardware designers to move C functionality into a hardware architecture, and c) co-exists C for co-design and co-simulation) with existing hardware in Verilog or VHDL Read More»

-

□

An optimal residency-aware scheduling technique for cluster tools with buffer module

Rostami, S.; Hamidzadeh, B.;

IEEE Journals

AbstractPlus | Full Text: PDF (256 KB)

Quick Abstract

Cluster tools provide a flexible, reconfigurable, and efficient environment for several manufacturing processes (e.g., semiconductor manufacturing). A new timing constraint (distinct from a simple deadline), referred to as residency constraint, puts a timing limit on the time that a wafer can stay in a processing module in a cluster tool. The authors demonstrate that a solution that does not address residency constraints can be found easily. However, when residency constraints are added to the model, the problem becomes complex and a scheduling technique may spend a long time searching for a good solution. Also, in some cases, one may need to decrease throughput to satisfy residency constraints. The authors introduce a new technique to address cluster tool scheduling in the presence of residency constraints. The proposed technique

uses a buffer resource for temporarily holding wafers to release other resources such as the robot arm. This resource is usually available in the tool for maintenance reasons. A tradeoff is discussed in using the buffer resource and a scheduling algorithm is presented that will use this resource when it can help to increase throughput under residency constraints. The experiments show that in many cases that are common in semiconductor manufacturing, use of their proposed technique can improve throughput. Read More»

 Next»

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Refine/Expand Results

Search within results: [_____] [Search]

Content Type

- ☐ Conferences (2,528)

- ☐ Journals (667)

- ☐ Early Access (20)

- ☐ Standards (4)

Publication Year

○ Single Year ⦿ Range

1960 ⧖ 2010

From: 1960

To: 2010

Author

Search for Author

- ☐ Prasad, R. (7)
- ☐ Kandemir, M. (6)
- ☐ Ohno, T. (5)
- ☐ Catthoor, F. (5)
- ☐ Liu, J. (5)
- ☐ Jun Li (5)
- ☐ Das, S. (4)
- ☐ Bauer, P. (4)
- ☐ Todd, T.D. (4)
- ☐ Katz, R.H. (3)
- ☐ Jun Zhang (3)
- ☐ Karmouch, A. (3)
- ☐ Lacey, J. (3)

- ☐ Menyuk, C.R. (2)
- ☐ Tanaka, K. (2)
- ☐ Lee, G. (2)
- ☐ Gupta, A. (2)
- ☐ Chang, E.Y. (2)
- ☐ Yamamoto, S. (2)
- ☐ Mizuno, T. (2)
- ☐ Liu, R. (2)
- ☐ Marano, S. (2)
- ☐ Gielen, G. (2)
- ☐ Principe, J.C. (2)
- ☐ Wong, C.P. (2)

Affiliation

Search for Affiliation

- ☐ Jet Propulsion Lab., California Inst. of Technol., Pasadena, CA (9)
- ☐ Dept. of Eng., Cambridge Univ. (5)
- ☐ Sch. of Electr. & Electron. Eng., Nanyang Technol. Univ., Singapore (5)
- ☐ Dept. of Electron. Eng., Tsinghua Univ., Beijing, China (5)

- ☐ Dept. of Comput. Sci. & Eng., Ohio State Univ., Columbus, OH (5)
- ☐ NASA Ames Res. Center, Moffett Field, CA (4)
- ☐ Dept. of Electr. Eng., California Univ., Los Angeles, CA (4)
- ☐ Yokogawa Electr. Corp., Tokyo (4)
- ☐ Dept. of Electron. Eng., Nat. Chiao Tung Univ., Hsinchu (4)
- ☐ Nanyang Technol. Univ., Singapore (4)
- ☐ Inst. for Infocomm Res., Singapore (4)
- ☐ Dept. of Comput. Sci. & Technol., Tsinghua Univ., Beijing (4)
- ☐ Delft Univ. of Technol., Delft (4)
- ☐ AT&T Bell Labs., Holmdel, NJ (4)
- ☐ Comput. Syst. Lab., Stanford Univ., CA (3)
- ☐ Hitachi Ltd., Tokyo (3)
- ☐ Jet Propulsion Lab., California Inst. of Technol., Pasadena, CA, USA (3)
- ☐ Dept. of Electr. Eng., Tsinghua Univ., Beijing (3)
- ☐ George W. Woodruff Sch. of Mech. Eng., Georgia Inst. of Technol., Atlanta, GA (3)
- ☐ Dept. of Electron. Eng., Tsinghua Univ., Beijing (3)
- ☐ Coll. of Comput., Georgia Inst. of Technol., Atlanta, GA (3)
- ☐ AT&T Bell Lab., Murray Hill, NJ (3)
- ☐ Inst. of Comput. Technol., Chinese Acad. of Sci., Beijing (3)

☐ Dept. of Electr. Eng., Chulalongkorn Univ., Bangkok (3)

•

☐ Coll. of Comput., Georgia Inst. of Technol., Atlanta, GA, USA (3)

Publication Title

Search for Publication Title

[ ]

•

☐ Parallel and Distributed Systems, IEEE Transactions on (48)

•

☐ Information Management, Innovation Management and Industrial Engineering, 2009 International Conference on (42)

•

☐ Journal of Applied Physics (36)

•

☐ Logistics Systems and Intelligent Management, 2010 International Conference on (31)

•

☐ Software, IEEE (29)

•

☐ Pattern Analysis and Machine Intelligence, IEEE Transactions on (27)

•

☐ Applied Physics Letters (27)

•

☐ Power Systems, IEEE Transactions on (23)

•

☐ IT Professional (21)

•

☐ Advanced Management Science (ICAMS), 2010 IEEE International Conference on (21)

•

☐ IBM Journal of Research and Development (19)

•

☐ Fuzzy Systems and Knowledge Discovery, 2009. FSKD '09. Sixth International Conference on (18)

•

☐ Journal of Vacuum Science & Technology B: Microelectronics and Nanometer Structures (17)

•

☐ Management of Innovation and Technology (ICMIT), 2010 IEEE International Conference on (17)

- ☐ Vehicular Technology, IEEE Transactions on (16)

- ☐ Lightwave Technology, Journal of (15)

- ☐ Very Large Scale Integration (VLSI) Systems, IEEE Transactions on (15)

- ☐ Information Science and Management Engineering (ISME), 2010 International Conference of (15)

- ☐ Networked Computing and Advanced Information Management (NCM), 2010 Sixth International Conference on (15)

- ☐ Circuits and Systems for Video Technology, IEEE Transactions on (14)

- ☐ Image Processing, IEEE Transactions on (14)

- ☐ Systems, Man and Cybernetics, Part A: Systems and Humans, IEEE Transactions on (14)

- ☐ Magnetics, IEEE Transactions on (13)

- ☐ Consumer Electronics, IEEE Transactions on (13)

- ☐ Computer Sciences and Convergence Information Technology, 2009. ICCIT '09. Fourth International Conference on (13)

Publisher

- ☐ IEEE (3,056)

- ☐ AIP (71)

- ☐ IET (51)

- ☐ IBM (23)

-

☐ AVS (18)

Subject

- ☐ Components, Circuits, Devices & Systems (2,644)
- ☐ Computing & Processing (Hardware/Software) (2,049)
- ☐ Communication, Networking & Broadcasting (1,914)
- ☐ Signal Processing & Analysis (1,141)
- ☐ Engineered Materials, Dielectrics & Plasmas (1,109)
- ☐ Power, Energy, & Industry Applications (904)
- ☐ Fields, Waves & Electromagnetics (721)
- ☐ Aerospace (657)
- ☐ Bioengineering (610)
- ☐ Photonics & Electro-Optics (603)
- ☐ General Topics for Engineers (Math, Science & Engineering) (536)
- ☐ Robotics & Control Systems (516)
- ☐ Engineering Profession (336)
- ☐ Geoscience (283)
- ☐ Transportation (251)
- ☐ Nuclear Engineering (150)

Conference Country

Search for Conference Country

- ☐ USA (384)
- ☐ Canada (22)
- ☐ Japan (17)
- ☐ UK (15)
- ☐ China (12)
- ☐ Switzerland (9)
- ☐ Singapore (8)
- ☐ Germany (8)
- ☐ Taiwan (7)
- ☐ France (5)
- ☐ Brazil (5)
- ☐ Italy (4)
- ☐ Finland (3)
- ☐ Spain (2)
- ☐ Belgium (2)
- ☐ Portugal (2)
- ☐ Hong Kong (2)

- [ ] South Africa (2)
- [ ] Israel (2)
- [ ] India (2)
- [ ] Egypt (2)
- [ ] West Germany (1)
- [ ] Netherlands (1)
- [ ] Slovenia (1)
- [ ] Mexico (1)

Conference Location

Search for Conference Location

[   ]

- [ ] Singapore (54)
- [ ] Xi'an (48)
- [ ] Atlanta, GA (43)
- [ ] Big Sky, MT (43)
- [ ] Beijing (40)
- [ ] Harbin (40)
- [ ] San Francisco, CA (39)
- [ ] San Jose, CA (37)

- ☐ Orlando, FL (35)
- ☐ Seattle, WA (33)
- ☐ Las Vegas, NV (33)
- ☐ San Diego, CA (33)
- ☐ Chengdu, China (28)
- ☐ Washington, DC (25)
- ☐ Dayton, OH (24)
- ☐ Honolulu, HI (23)
- ☐ Taipei (23)
- ☐ Shanghai (23)
- ☐ Boston, MA (22)
- ☐ Seoul (22)
- ☐ Wuhan (22)
- ☐ Busan (19)
- ☐ Vancouver, BC (18)
- ☐ London (18)
- ☐ Tianjin (18)

Brought to you by

United States Patent and Trademark Office

- Your institute subscribes to:

- **IEEE/IET Electronic Library (IEL), IEEE Draft Standards Online Subscription**
- What can I access?

Terms of Use

SEARCHES FOR THIS SESSION

- cluster management and adding candidate device (3219)
- cluster management and adding candidate device\ (3219)
- More Search History

Additional Results

Application Notes (beta)

Indexed by

Help | Contact Us | Privacy & Security | Site Map | IEEE.org | Nondiscrimination Policy | Terms of Use

© Copyright 2010 IEEE – All Rights Reserved

Back to Top